

SEQUENCE LISTING

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<120> PROCESS FOR PRODUCING TRANSGLUTAMINASE

<130> 209524US0CONT

<150> PCT/JP99/07250

<151> 1999-12-24

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<151> 1998-12-28

<160> 58

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Met Asp Ser Asp Asp Arg Val Thr Pro
1 5

cca gct gaa cca ctg gat cgt atg cca gat cca tat cgt cca tct tat 161
Pro Ala Glu Pro Leu Asp Arg Met Pro Asp Pro Tyr Arg Pro Ser Tyr
10 15 20 25

ggt cgt gct gaa act gtt gtt aat aat tat att cgt aaa tgg caa caa 209
Gly Arg Ala Glu Thr Val Val Asn Asn Tyr Ile Arg Lys Trp Gln Gln
30 35 40

ggt tat tct cat cgt gat ggt cgt aaa caa caa atg act gaa gaa caa 257
Val Tyr Ser His Arg Asp Gly Arg Lys Gln Gln Met Thr Glu Glu Gln
45 50 55

ggt gaa tgg ctg tct tat ggt tgc gtt ggt gtt act tgg gtt aac tct 305
Arg Glu Trp Leu Ser Tyr Gly Cys Val Gly Val Thr Trp Val Asn Ser
60 65 70

ggt cag tat ccg act aac cgt ctg gca ttc gct tcc ttc gat gaa gat 353
Gly Gln Tyr Pro Thr Asn Arg Leu Ala Phe Ala Ser Phe Asp Glu Asp
75 80 85

cgt ttc aag aac gaa ctg aag aac ggt cgt ccg cgt tct ggt gaa act 401
Arg Phe Lys Asn Glu Leu Lys Asn Gly Arg Pro Arg Ser Gly Glu Thr
90 95 100 105

cgt gct gaa ttc gaa ggt cgt gtt gct aag gaa tcc ttc gat gaa gag 449
Arg Ala Glu Phe Glu Gly Arg Val Ala Lys Glu Ser Phe Asp Glu Glu
110 115 120

aaa ggc ttc cag cgt gct cgt gaa gtt gct tct gtt atg aac cgt gct 497
Lys Gly Phe Gln Arg Ala Arg Glu Val Ala Ser Val Met Asn Arg Ala
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cta gag aac gct cat gat gaa tct gct tac ctg gat aac ctg aag aag 545
Leu Glu Asn Ala His Asp Glu Ser Ala Tyr Leu Asp Asn Leu Lys Lys
140 145 150

gaa ctg gct aac ggt aac gat gct ctg cgt aac gaa gat gct cgt tct Glu Leu Ala Asn Gly Asn Asp Ala Leu Arg Asn Glu Asp Ala Arg Ser 155 160 165	593
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 35 40 45

Arg Lys Gln Gln Met Thr Glu Glu Gln Arg Glu Trp Leu Ser Tyr Gly
 50 55 60

Cys Val Gly Val Thr Trp Val Asn Ser Gly Gln Tyr Pro Thr Asn Arg
 65 70 75 80

Leu Ala Phe Ala Ser Phe Asp Glu Asp Arg Phe Lys Asn Glu Leu Lys
 85 90 95

Asn Gly Arg Pro Arg Ser Gly Glu Thr Arg Ala Glu Phe Glu Gly Arg

100

105

110

Val Ala Lys Glu Ser Phe Asp Glu Glu Lys Gly Phe Gln Arg Ala Arg
 115 120 125

Glu Val Ala Ser Val Met Asn Arg Ala Leu Glu Asn Ala His Asp Glu
 130 135 140

Ser Ala Tyr Leu Asp Asn Leu Lys Lys Glu Leu Ala Asn Gly Asn Asp
 145 150 155 160

Ala Leu Arg Asn Glu Asp Ala Arg Ser Pro Phe Tyr Ser Ala Leu Arg
 165 170 175

Asn Thr Pro Ser Phe Lys Glu Arg Asn Gly Gly Asn His Asp Pro Ser
 180 185 190

Arg Met Lys Ala Val Ile Tyr Ser Lys His Phe Trp Ser Gly Gln Asp
 195 200 205

Arg Ser Ser Ser Ala Asp Lys Arg Lys Tyr Gly Asp Pro Asp Ala Phe
 210 215 220

Arg Pro Ala Pro Gly Thr Gly Leu Val Asp Met Ser Arg Asp Arg Asn
 225 230 235 240

Ile Pro Arg Ser Pro Thr Ser Pro Gly Glu Gly Phe Val Asn Phe Asp
 245 250 255

Tyr Gly Trp Phe Gly Ala Gln Thr Glu Ala Asp Ala Asp Lys Thr Val
 260 265 270

Trp Thr His Gly Asn His Tyr His Ala Pro Asn Gly Ser Leu Gly Ala
 275 280 285

Met His Val Tyr Glu Ser Lys Phe Arg Asn Trp Ser Glu Gly Tyr Ser
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Asp Phe Asp Arg Gly Ala Tyr Val Ile Thr Phe Ile Pro Lys Ser Trp

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